

UNITED STATES
DEPARTMENT OF THE INTERIOR

—
GEOLOGICAL SURVEY
—

9-138

VII.

ASB

VIII

Sweet Springs Area
W Va. - Va.

1941-42

Revised 8/7/42

Received 8/7/42

122

1941

12
1941

Two Days

from Pt. St. to Pt. Valley, on
[N35E, 20SE - cont. from previous point - on
to valley from Ten Towns Rd]

0 - 1/4 mi. on m - entered country on road
about N46E 28SE

37 Top of hill N45E 39SE

38 Hill N45E 39SE

39 On the road about 1/2 mi. - N45E 39SE

45 Ed-Mary N45E 16SE

61 sharp fold N45E 36SE (sharp) - in
valley but for to top of it, N48E 53SE - the
- after up the road, another lower
hill

2.02 - road heavy and the cut at 2.0 - in
90 speed limit road

- N40E 72SE - turning on front 2nd turn
before road in Point Blk

- N45E 6 - road 25 mi - left - about
1/2 mi. to 1/2 mi. - then a point from
road to a stream

1/2 mi. - = 1/2 mi. - 3/4 mi. from point to
1/2 mi. on road - corner point

all part of
2.02 - 1.5 mi. turn of road up
to 1.5 mi. only at fork

N45E 39SE - pt. 59 W of house & 2 SE
to valley 1/2 mi. from 1/2 mi. to 1/2 mi. beyond
house - 4 mi. to point - 2nd

51 - The center of ESE (yol. room)
 N35E 60W - 10' - 25E yol. room

N70E 17±SE - 2.8' - = same elev. as
 last N. 11' 20SE 9' yol. house

Run of 1100' SSE of yol. house - 15' to
 1' and 1/2' - 1100' - N75E 15SE

24.5E/68SE - reddish E of May 2
 sh. 0.5 m. from road - in
 spring zone - between road and
 church - looks like May 1 (L)

N73E 69SE - 125' - 1' of it - 1/2'
 - 1' of it - 1/2' - 1' of it - 1/2'

and get to 1' = .05

216

Aug 25

Mon

2170 (920) - at school 20' - 30' to

217

N40E 54SE - "Duck" with 100'

at 10' - 24.5 - 24.25 - 24.25 - 24.25 - 24.25
 - 20' long - 5' deep - 10' wide - 10' high
 - 2' deep - 10' wide - 10' high - 10' high
 - 10' high - 10' high - 10' high - 10' high

- 2' bench ± 11 to 12' - same height
 & on corner ridge - top 2410 (10 AM)
 - both then on York (and close
 to Bk. Janna I. land) - They are
 low main ridge on York land
 - 20' beyond lat - some more
 ore but all very sandy - some
 low good weight

N40E 55SE - 2 cry. d
 2330' (10:10)

on ridge - 2410 (10:10) - same as above
 in 3' - same as above

East of Janna I. - 2410 (10:10) - same as above
 in 3' - same as above

218

- Clinton (red) // N61E 57SE - can
 be made 2450 (10:50) - then
 on York I. + then type on York
 in 3' - certainly must be Clinton

N153E 59SE - good vegetation
 2415 (11:00)

N53E 51SE - red sh. by 12' - then
 to turn to R - 2405 (11:10)

$$\begin{array}{r}
 49 \\
 26 \\
 \hline
 37 \quad 10 \\
 27 \quad 2 \\
 \hline
 1287
 \end{array}
 \qquad
 \begin{array}{r}
 32 \\
 23 \\
 \hline
 6
 \end{array}$$

$$\begin{array}{r}
 4635, 4435 \\
 \hline
 2340 \quad (4400)
 \end{array}
 = \text{net - gross} = \text{sum}$$

$$4600 - 2350 = \text{sum} = 3330 \quad 4:35$$

1460E, 110SE - red-gray ss. = Jun.
2340 (4:10)

110E, 35SE - Jun - 3330, 4:25

1460E, 52SE - " 3285 (4:20) -
" area just beyond
3215 (4:25) - yellow sand, probably on
Ed - 1945 - road to car - 295
then 3285 (4:30) - car 65 mi from
Buck Valley rd - area of rd
2770 (4:45)

.45 mi SW of Swan R. X - 1945 on 4th

Aug. 26 - Tue.

To Swan Harbor in Bluff - talked with
W. B. Green, brother to H. B. Green (later
more active in Min. work) - Miller Min
Mining Co. (not owned by Green)
Shawnee (first also worked Green)
H. B. Green & J. L. Helvey (partner)
- bought Miller property 3-4 yrs ago
- have operated it continuously since
- operation has been a real good way
- have got off = half of cost of
property
- having a lot of trouble at Miller
- about 1200' pipe line from
mine opening - which then went dry

- Anne Boyd now paying \$2.00 per lead
 for working lead - up from 100 to 1200
 [think it will go higher]

- Wash. Co. - [unclear]

- Anne Wash. Co. - Bluefield
- visited Holly Brook - Anne in NY - saw
 Cornish (claim Anne now actually in
 side room - discuss 500 per mo from
 Anne Zinc & her become interested
 in deposits near Stanton, etc) - are
 working on washer - have put on new
 logs - one to rock - clogs - to
 move in Bank Bank table.

Aug 28 - Thru.

To Grand Mt. Summit, 2480 ft
 1st Linton passed over (thru. near right)
 1.4 mi below Mt. St. Andrew - 1560 (8⁴⁰)

219

- up into 1540 (9⁴⁰) - [unclear] in [unclear]
 [unclear] - [unclear] all [unclear] - [unclear] [unclear] in
 [unclear] [unclear] - in [unclear] [unclear] - [unclear] [unclear]
 - [unclear] [unclear] in 1939 - 18" [unclear] [unclear]
 [unclear] [unclear] & [unclear] [unclear] - 1' ± [unclear]
 of [unclear] [unclear] NW - SE, dipping high
 to NE - [unclear] [unclear] [unclear] [unclear] [unclear]
 clay - a good sized branch after rain
 - [unclear] [unclear] [unclear] [unclear] [unclear]
 - [unclear] [unclear] [unclear] [unclear] [unclear]
 yellow clay on both sides.

- down to have dug out clay to 1000 lb
 of one of varying quality - on sample
 some of sandy piece of ore both
 coarse enough to be Driskany.
 Big small pit in bank on the side of above
 exposed - in clay, sand & sandy clay
 showing good bedding N82E, 32N (whole
 bank however may be ~~striated~~) - note
 joints in gully clay - well laminated
 - looks like Tonoloway - then was
 a continuous 1" bed on on pit - clay
 bank 10' high here so. above this might
 be Driskany or placinar clay - bank
 is 10' high

220

1825 (9:50) - ^{lower to} large heavy ~~thin~~ ore in
 Lth branch - 15' exp. - apparently in
 little fold in strata here - with ore
 in overlying Ton? - ss in N60E, 35NW

- 1825 (10:00) - ^{lower to} large heavy ~~thin~~ ore in
 Lth branch - 15' exp. - apparently in
 little fold in strata here - with ore
 in overlying Ton? - ss in N60E, 35NW

- 1935 (10:20) - N24E from ^{upper to} = crest of
 plateau - strata ~~bedded~~

- 1950 (10:30) - ^{lower to} large heavy ~~thin~~ ore in
 Lth branch - 15' exp. - apparently in
 little fold in strata here - with ore
 in overlying Ton? - ss in N60E, 35NW

- 1840 (10:30) - N55W, 5NE - Clinton ledge
 four ~~or five~~ - ~~some~~ ~~large~~ ~~ore~~ ~~to~~ ~~the~~ ~~7~~

N45E, 37 NW - Dbs - 2620 (11.10)

P. DA.

0 - E -

21 - S25E

60 - N70E

45 - S30E

54 - S50E

454 - rd at 1.78 mi from 0131 station

Location Sd-Mg, N70E 40SE - in cut just
beyond fault to fault sp. on larger gully fault

2320 (11.05) - intake of Moc. - E-M N25W 40E
good section exposed here of upper pt.

St. R. complete Moc + lower E-M. -

boundary between Moc + E-M. - below
lower section of 1st in th. - Sugar Grove

Fault here has been mined. N of rd - between

E-M on S + St. R. on th. - then apparently

in room for all of E-M between here +

Jun of Little Mt. - Moc N47E, 53NW

2170E, 40NW - Moc (red) below - 2305

- shear or cl. plane is N50E, 55NW

2260 (2.10) - above rd - Moc - red

Rd 2250 (2.15) - .65 mi from point of
on dirt rd up to the valley

Sugar Creek School - there is a fault
at spring as mapped is right - the
Moc. comes in just above spring
(on R. side) between Sch. site + spg/
N 60 E, 70 NW

- further down stream red Moc. here
N 75 E, 74 S

- still further - down to house are
great Ed. May - Ers. N 74 E, 65 N

3 mi. NW Sugar Creek Sch. - contact of Moc.
+ Ed - May - 15' down road across creek to N
N 55 E, 45 NW ✓

- N 50 E, 53 NW - St. River at the creek 1.54

1.38 rd to L.

1.41 - L. (= down map //)

1.48 upper bed sink - on R

1.71 turn L - up to house + 1500 ft + SE

but no crops - E-19 bank near house

Fig. 29 - Five

(

Station to Sugar Spring St. Peter's Bank.

the river bank - 1000 ft down to the spring - road
from church to get water poured out
a - church

58 - St. Peter's - 1000 ft down to the spring - road

N 75 E, 74 S (1000 ft) - 1000 ft + 1000 ft + 1000 ft

the spring is at the bottom of the hill

746 - reddish shaly ls - Merc - N65E, 84, 1154
 123 - gray ls. - probably still Merc - N75E, 4, 1154
 122 - " " thin & shaly, deformed - N75E, 90 SE

125 2.5

P: 2.5

144 - reddish shaly ls - Mac - N65E, 34SE
 103 - grey ls - probably still Mac N75E 34SE
 110 - thin & shaly, deformed N75E 30SE
 - probably lower part of Ed-Mary - yellow
 sh. floor between crops

146 - mostly sh. highly fossiliferous of Ed-Mary N74E, 30SE
 188 - sh. fcl

There is no fault there here - Mac. is on
 and - slightly contorted - + it falls very thin
 - sponge apparently, more close to axis of a large fold

pt. N28W of car & N50E - channel - road N50E, 30+NE
 section by 30 ft. section between here & car - top of
 bed about 100 feet wide [295' (9.35)] - may be
 somewhat wider

2895 - between ^{also} 700 & car - N50E 30NE
 - shaly ls to fcl base

at 2850 (9.33) .47 mi from point rd

N70E 65NW - 10 mi from top of 1975 (10.25)
 pt. N70W car 400 - pt. at 1/2 mi (1.58)
 (1 to R)

N77E 33 - red Mac. in full 345E & lower
 sh. bed above pt. 10 R - road here over
 St. R. (see N77E other than) 2325 (11.11)

N53E 15SE - 11.1 Mac. in full N53E & lower
 123E 24SE - " " " " N52E " 10

2330

1000' - 1000' - 1000' - 1000'

- N45E 21SE - 21 Pa - see maps 233

- .62 back from lake turn $L = 0.0$

- 11 Knox $200 +$ chert 1000 m. 1000 m.

- N45E, 21SE - St R. - sur. mag. 233

- 62 look from peak turn L = 0.0

- 11 Knox dip + crest first with dolomite
N43E, 21NW

- N52E 11SE - St R. - on road (1/2 mi W 50 mi
3-5 mi lower) - for which 50

- N76E, 50NW - red & grey moc. 2 mi
SE of fork to spring on Ranch road

- cor at 45 - N40W 52° = red moc N72E, 51NW

40' - St R. N72E, 86NW

- N55W of house. 18 mi from fork to spring
on R. at elev. 2295' - Red moc N65E, 27NW
(315' on gully)

- N75E 69NW - St R. - on road - 2255'

- 2095' gully above road

- 2115'

Maximum S41E from St R. to Edging - distance
at 0.60 mi

0 = St R. N25E, 25NW - 2240

331' = 1/2 mi on gully N55E, 30 ± NW
2280'

2260 - low red moc. - 53 ft beyond

1
22 6
10/10

SHUE

SHOE →

2340 -

2265 -

2240 -

← 45' → 331' →

Sept. 2 - Tues. - Back Valley

1140E, 43NW - 100' ^{100' F.L.} E. with Back valley
rd. at pt. 13 mi - partly clear E. Moe
cont. old here - crop ^{small} sink hole - swamp.

MOC NW 70E 85 NW - SE edge big
sink on Back valley - 100' ^{40'} rd to
SW of Sugar Co. det. the MOC .2 mi
SW of back.

- 0.39 - 1.35 Back valley - track from
- 0.39 - fork of road in ~~valley~~ ^{valley}
~~swamp~~ / other branch climbs toward 8th M.
- 0.89 - still S of 194 - still in ^{just N}
1.35 - end of ^{road} ~~road~~ - in sh. ^{for} in (old
(Red) 1 E-M

221

- 1.7 mi S of 194 - ^{area} L of
old road

.03 NW 1E, 49SE Dbs in cr + Rbk.

0.1 - Turn R

0.32 " L

0.78 - crown branch - floor to R

Dbs N60 E, 13 NW - gray ph. &
hard ss

.80 fork continues SE ahead (=L)
.85 (B) bed

back to .80 - to R -

1.11 R on floor N55 W = Dbs N65 E,
27 NW

- 1.35 on R - N42 E, 13 NW - Dbs

- 1.40 N45 E 45 NW - turn around - "

Sept. 3 - 1961

With Edna & Pam went to see section. E
about 1/2 mi. on highway. Pam says Woodward
has identified that ss as Pachydictya
or one of the ss from near above
"Oriskany" long Bocr. fl. little known
at top of ch-ls maybe Ediacrinia
pacelliformis = Shinarump chert = Pod E
+ Bocr. fl. If so = Bocr. fl. &
ss = Pod E then no
Oriskany in the section

- 550 E of Linton house (on Elm Run) - Dbs
Bl sh. knob 2-0.35' (11:50)

2160' (12:05) high pk - 110' deep -
Bl (chert) fl

- 2195 (12:13) no crop - dark & bluish
faint, mostly the latter
- 2220 (12:20) Lev. 12 at floor
- 2240 (12:25) Dr. red + yellow sh. fossil
- on rock - big drops between
here & Little Mt.

Gap Miller - old red



222

Light 5

For

- Over 2540 - clear 11th Apr. Over
- 3020 - top of Mt. 12:25 - 1st floor
- 2700 - 12:55 - red sh. floor -
- 2500 - 1:10 - 1st floor with many
- delicacies

Rd. to 1st floor

0.02 old red

23 - 5th floor - 1st floor - many

0.40 - 1st floor

223

- N 85° 22 N - 47° E Glen - lower branch
of grey Muc.
- N 37° 37 E - Ed-M soft yellowish
clay - in ed. 57° E of Glen + 57° W of
main E-M belt - the apparently part of
main E-M belt
- grey ls. bed with ostracodes - probably
Moccasin - 54° E Glen - very near
cut of road - N 30° E, 21° SE
- N 48° 27° E - same as above - 57° E of Glen - clay - red - 200' - 250' - some blue
small blue lim. + mod. ostracodes - sandy
all small pebbles - These belong in grey Muc.
- Red - Mar 57° E Glen + 47° E of Glen
N 65° 17° E (near 57° E
from Glen)



Moc. belt appears to
be only 130' wide here
+ red phase is very
poorly developed. (thin
water fossil bed)

St. Paul Vaughn - 47° E of Glen

N 33° W, 40° S W - grey Muc. 57° E Glen

N 34° 32° E - " 57° E

W 100°, 45° S W - red Muc. 46° E - 20' ft
in yellow - to 100' - Glen

-160 p. toward Cates - have red area of area
- 240 p " " - draw of same

Sept. 6 - Sat

time 1865 (McCable house - on rd) 8 PM

W. W. Baker land (see map - sketched from
C. P. Barnett blueprint) - total 210
acres - pit opened 1939 - by G. A. Patton
for Thayer - elev 1800' on rd at
pt 1.02 from water.

N55E & NW - 2100 (8' 3") - Clinton
mine - heavy beds ss - saw only
Clinton flint on way up - in N55W
of car

High Road N85W of pt where Clinton
mine to road rd - 2220 (8' 3") -
all Clinton - see N55E (mine with pit)

N55E, 2100' heavy beds ss
forming fault - 2260 (9' 0")
about 1/2 mile toward Oak Grove
with many beds "crustling" but
no good for. found after fair search

* time 1790 - rd - 10' 15" (down 10' in
2 hrs.)

- Road on Potts Cr. SSW of Yellow house near
Paul Bank = Dbs. N55E. 8' - fault - fine - high - 6 SF? 10

223a - to encountered on west clutment
of ledge at Point Buh = Tm or Dev?

Sept. 9 - Tue.

224a ✓ Clinch Mt. - conducted to "prospects"
by Eliza Mc David - on local
red Clinton just over Clinch
on crest of Mt. - ferrug. - ^{N55E}
- no Mn - no - cylindrical ^{28NW}
- Clinch exp. lower on NW.
- Clinch + Clinton alternate
on crest - most of Clinton
red - outcrops (smooth)
in white iron stained med. gr.
so at one pt - climbed
mt over St. R. - 1700 - E of
- did not see Tm. - at
"prospects" not even good Mn
stain (white of clay) that
from Mn. Sheppard? - and Mt. cylindrical
- cylindrical on NW. - one entire Don to SW of
on David place

224a ✓
Sept 10 - Wed.

to far and range - ferrug. but some
good Mn.
W. contact old full water North
W. to. Quarry (Clinton base 1-2 ft)
- Adfg - see this to answer my
question

at the end of the road - encountered Tm.
then on the hill with some quartz in

Quarter Board, part of, lying
 (acc. - range min) 250' above
 (beyond) Ten - 5 ft. long - 1/2" thick 75'
 higher - pit exposed following -
 0-3' - Db - little more, soft
 3-6' - " - harder, impure, with Mn
 6' - Tm - soft Sam. clay

left side than on min. side - some of the
 material in upper part more or less
 are probably all conglomerate acc. Mn
 - little more than in many.
 water it is more broken.

- can operate Mar. 11th successfully in
1-15. later some cases see them

2 bottles for 8 hours

2. 1

1-10 ratio (1-8 sub. in lower mol)

300,000 - 500,000 - March only

720-138 now -

5. Mexer (Marum + Stange) - Fluss

- change in rock up to be in some in bluish
- replace the - part in bluish (upper)
- with poor sedimentation in ss - clay are
- varicolored, laminated, some of them
- are bright green - some orange

- some on good thin light, dull, &
probably high in silica - nodules
in clay - clay red - green -
not as well lamin. as Tom. - say
these parts on up hill are fairly.

Greenwood D. of. (lower) of Greenwood
+ 10th - Lifer in map.

Morning got in 2nd day with Tom
Bordelon - no more dig? - same
pink & gr. clay on Lifer + same
light wt. nodular ore

Sept 11 - Thane Boyd washer
- 1 ton out of 2 tons - 1st day (4/11/45)
- 1.20² loads in two cars
- 6 cars (1st day) no green powder

- 2nd day 1st + 4 other day
- on 3rd Sept car
- 10th ship

Car analysis (ordinary 2 1/2 lb. per barrel)
46.74
44.25
44.40
45.45 } first day - ore

- 7 cars W.M. (41-42 lb)
- 4 " E of E M no 35 + M n

* 225
(miser
has
spec)

- Tailings - Same to Allen & Co. Steel Co.
- Pa (19 + 111 ?) - 400 - 475

- Boyd getting good quantity separation in
main setting of pipe but a lot of light
pyrite ore in conglomerate tailings - took
sample of this - Mr. M. suggests grinding
it to powder - some pyrite
very good separation - distinct from
the pyrite in black powder to
darken up tailings -

~~Take sample of tailings to laboratory
material for grinding ball.~~

~~Get - measure pit in case of it~~

Loaded Green water out - water moved
- remaining on dry foot - very high places

226

- pit at end of main run to settling
of newly found clay tailings house
- 1st (1st process) - Mr. M. says
is irregularly set in ground follow
line (some pyrite) - see red mat.
- all over with 2 Ton - spec. includes
ostracoda in ss from Clinton crops.

227

- made sample of this [?] in pit at
main - see spec - Mr. M. study
- this pit below Clinton crop
- see below 1st & 2nd + coal

on surface - see coral coll. of HAM +
 of Fish Tops - this same area
 largely Ton

- 200 ft out of pit 200' ± beyond
 surface boundary - at least 25' out
 in pit - low int. reached bottom

- excavated fault & root in sandy
 matrix at depth 20' ± below ground
 surface - see sampler - this is
 cavern filling of roots?

- walk of pit shows Ton from side
 above & below zone 1 ± thick showing
 a distinct, laminated structure
 - slightly irregular up to 3" in diameter
 - this zone cut by minute faults &
 shatterbed - low 10-12' below
 original ground surface - a deposit
 in a cave in Ton?



228

(miser
 has all
 spec)

- not to
 Brown

see collection
 photos

2-12' hole to E of East Main
all in bruchite

- pit to SW of large well
- all in E to 30 all (old)
- bruchite only, where working
- 2 holes of 14" in present pit
showed out to 10-12'

Sept. 12 - Fri. Boyd Stephenson

Since 53' - ground level - none
of available (7-5) can in (1905)
- 5' hole was open - was about
to 10" to 12" on bottom under



2-12' hole - water - water
near mine

- old shaft & track - to below in
old road

Small piece of old mine are scattered over
down pit usually from recent excavation

229

- Mine to have pink Tin listed for Mn
(3-40% with iron source)

- all ore from the proposed area about
 100' to 150' - mostly pyritic
 I want to get 100' beyond pit
 will do at depth of 2' (6")



□ Ton

□ Ton

□ - in pit with
 near to section - 1' thick
 N 35 E, 65 NW - vein of
 ferrug. mat. (iron lower)

pit going N 73 W
 of drift - exposed
 SS N 20 E, 68 W - pit
 is deep

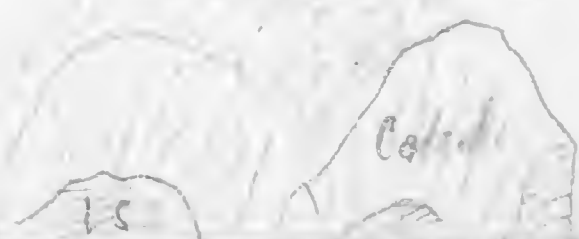
- examined every shelf just down 20 p
 down recent deep shelf - 6' + up, 15' deep
 - too low clay N 10 E, 4 + var. - soft pyritic
 - in each bottom mass of hard ls - all
 veins very fine + all with deep pitting.

- at the main shelf the weathered zone under the
 slumps + solid ls fills fissures - open
 for only 10-15' along strike

- open pit adjacent to main pit shows
 relation as below

Pyro. + clay

- Cave?



1) dep. ls + sil. to floor
 2) dep. of calc. to partial
 full cave
 3) dep. clay - 10' N

230
 main has
 all spec

"Shenandoah Co." property, Bath Co., Va.

W. G. Hoover - Warren Spgs

C. Shreve - Marlinton

- analysis found on 2 - Shreve

mm 59.9

mm 0.2 94.69

mm 0 77.34

} Pyroclastic

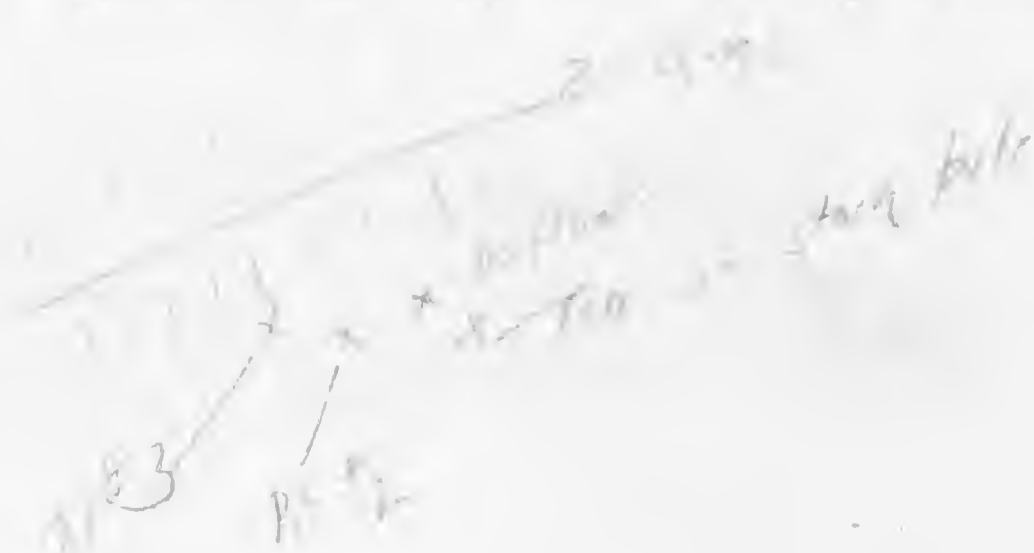
231

Unit no 3 - Shreve, with mm
(fossils) - in rounded form - 100?
- for analysis on paper
+ Pomeroy

231a

Unit no 2 - Shreve, Project - from that
range uncertain

near 47 SE - Trench, ^{at Shreve} for 20 feet - 100?
from 100 - 150 - 200 - 300 -



- examined both Meadows project - 1st
- clay over bed - but one from
taken. This is very a paper
- head of Branch Brook Run

Sept 13 ~ Sat

231/26

232

232a

Reexamined Anthony Creek section with Mason. This section is badly deformed by folding + faulting (see sketch). Some involved are Doe - Don - Do - Ton - Clinton (Keeper). At NW end Doe is found near bridge (at pt 1 mi from above) - Do + Don + Do to big belt Ton (675' wide) - then small fault - then Super arch - bigger fault + long covered interval from Clinton with much Luperdetia fauna in ss. Then covered then more Clinton ss dipping under Ton of quarry. - lower part of section Ton, upper pt. maybe Keeper

visited Wagoner mine + nearby pits - some have galled good ore + piled on dumps + across next to hole opening that we opened in July - but no more to be seen here!

Sept 15 ~ MTD

233

Spruce Run Mt.

William, Wright + Mason on mine north - Guesd L. Heter. - have opened 36' trench into bank - show 4' face of ore at end - in clay - some

some stopped during last war - working below - Hiner + Barton came in 5 ± yrs ago - unmined

12' face - took out several cans -
friction - did not pay labor - attached
on -

- Sept 12 - car shipped from Morris
- worked & gassed to Stange
- at 9-1 ratio - to Larine Lyndley.
- 12-15 tons shipped to Larine
month or so ago

234 - near Stella Rodenburger property
some 200 yds to west & 150' feet
higher - ferry met with very
little rain. McD. Hunter &
Hebert are partners & have main
mill - built 15 yds back & 6' high
at mt. end - removed 5-6 yrs
ago by Mason Long.

- examined old stock pile of less than 1
can in valley below

- 4-6 cans up'd shipped last week
(2 cans as much earlier date?)

235

App. One - Mr. Felling Schenck - St. Joseph
- 10 cans washed during Aug - gradually
shipped

(over)

In measuring surface of one of the objects -
date of ... of ...
... ..

-
-
-
-
-

Sept 16 - Tuesday
... ..

short & dry, full of holes in short

Sept 16 - Tuesday

Sections to be measured

1) South of Gap Mills

- from Spring Hill to fore edge of line of sinker - across
St. Louis R. + Mocc. to top of hill beyond
which is depression occupied by Ed. May.

2) Gap Mills

- from NW edge of hill - gap - to top of
Clinton - Clinch - to Jun.

3) SW of East School - from edge of hill - St. Louis R. -
across St. R. to top of hill beyond which is depression

4) Roney farm - from Ed. May across Mocc.
to St. Louis R. near road

5) a) East Bank - from Dbe. across "Barnyard" +
Barren to Top of Hill

b) From Clinton across Clinch to Jun.

6) P. H. 41 - from Clinton across Clinch + Jun.
to Ed. May

7) Sugar Grove S. - from Ed. May across Mocc. to St. R.

155 ft ^{road near} always foot bridge over Potts Cr
below Paint Bank - L bank -
all Clinton foot - Dk, like
Dk in creek, must be nearly
on end here + ∴ no flat iron
- actual crop covered by Clinton
foot?

Sept. 17 - Wed.

W of Laurel Hill where R.R. cut
old rd - head NW 2 W ± E road
lower. at rd 2130 (1120)

- top of Dk knob 2740 (2130) - top
forming Dk but no form. Clinton
foot (red & white) also present
- a topog. break between here & Mt.
for L

- heavy Dk bl sh (flat to NE of
creek at elev 2710 (2120))

Mn	12 % (probably 20%)	} Union Carbide Co. Cu type Q.T.
Al ₂ O ₃	3	
P	.2	
SiO ₂	bal.	
Iron	no diff	

Note -

Mayer chert analysis from 31 of 11/11/1919

Sept 18 - Thurs

To Old Tox with Miner - picked up
Ben. Miner (plotter) - met briefly with
Stange, met son of Sinter Mine Miller
who now is with Ohio crowd that
have signed lease with Conley & have
leased Stange's washer.

To Boyd mine & examined latest
workings in new pit



Silt and talus

Zone Ton lam. clay (residual)

silt. "corals" in sec and clay

alternating layers Mn. & sandy matrix

Ton. lam. clay (residual)

covered

236

In section diagram on preceding page the elongated masses of fossil corals would occur with convex surface up (or nearly so) - all of the same mass in upward lower (fallen in case) - the "coral" masses are mostly lying on side not contact opening in one of them -

- See Gallagher photo of section to R
- This ~~section~~ ~~is a case~~ ~~long as section~~
+ only a little more are present -
plant bearing seeds ~~and~~ ~~of~~ ~~the~~
Third type is apparently much younger
~~than other two~~

Sept. 19 ~ Fri. - "V. Beck Valley" - to see Gop. Mt.
- at pt. .55 mi NW of pt. where Dry Run R.
rd turn V to R [0.55 mi]
are "2535" - 10:30 - get to main valley at 1

237

"1725" (10:25) in valley floor
- "2735" (11:10) - top of " " - Db level here
- "2795" (12:22) - see highly fossil, chert boulder
- see this Onondaga ¹¹² (with some good
limestone in specimen)
- "2825" - " " apparently out of chert - no good Db in
heavy flint - it appears light colored Clinton
- no red Clinton
- hope on some other part of Clinton may help
up Mt. here - then would check with occurrence

→

of red Clinton on SE slope
 - 3005 (11:40) - went right on crest Gap Mt
 near gap - N40W, 3034 (11:42)
 - 2980 - low forest on crest of S. - all white
 granite on crest - no red Clinton
 not on NW side Gap Mt - plenty
 of thin forest on SE is just
 before on crest here
 - 2950 heavy type forming. Db₁ in here - with
 few leaves in low E. higher
 * 2935 on rd. (12:30) = up 10' per hr to

Roxana - 2550 (11:05) - trail out Gap Mt.
 - 2690 (11:30) - Low forest & some "buccatit" in
 cemented of Mn - red Clinton just
 present here in some abundance - all small
 - 2750^(1:35) - sandy it forest still abundant
 2780 (1:40) N60E, 49SE - Dbs - pt. 278E = 18
 Roxana taken to the crest 2805 - (2:25)
 2895 (1:50) Low forest abundant
 2930 (1:55) " - May be in place
 2965 " - forest - some Mn. in buccatit
 3010 (2:00) on S. side of Roxana
 3120 (2:10) crest Gap Mt

236

N65W 25SE Cloud - just below crest on SE
 Cloud hides up into here lot red wood
 31

Location actually occurs on creek to
SW of pt where trail crosses - 350' (W)

Dip Road - N55E / ϕ

Sept 20 - Site - well of water spring

- 1770' top of gray sh. with green interbeds - probably
brought up by wind (or wind) & blowing material for
some distance - top 165' of Bowerman - 500'
if you like. N55E 82NW - 2045' (1845')

Location where first found of 200' - 200' - 200' - 200'

1)	0	240E	"2050"	<u>N50E 70NW</u>
2)	10	"	"	" / 100' (100)
3)	34	"	"	<u>N55E, 56E</u>
4)	50	"	"	<u>N63E, 45NW</u>
5)	40	"	"	<u>N50W 15NE</u> - 100' (100)
6)	100	"	"2055"	<u>N25E, 82E</u> - 2055' (2055)

Know - 5310' of Coal from Sta. 1 - 3050' from Sta. 2, N14E 22SE - 2050' (2050)

.15 toward Vela from Coal Sta. - St. A, N55E, 80NW
in creek

N35W of Coal Sta. L. H. creek N30E, 75W - 2050'

Know N53E / ϕ - 100' from Vela

100' - 100' from Vela to Vela Sta.

135 St. R. - N-S, 100' - 2050'

390 Know N48E, 22SE

$$\begin{array}{r} 1320 \\ 210 \\ \hline 1510 \end{array}$$

$$\begin{array}{r} 1320 \\ 210 \\ \hline 1510 \end{array}$$

P = 2.16

1265

426 Know NSUE, 80SE ✓
 474 " NSOE, 75NW ✓
 485 " NS3E ✓
 772 - Viola ad

P = 2.6

1265

426 Know N50E, 80SE
474 " N50E, 75NW
485 " N53E ✓
772 - Vicksburg

- Glassy rd - poor exp. - .18 = (max?) .20
= St. R.

? 2.
N10E, 10E - St. R.

Moc? - gray - N60E ✓ - behind Dunn horn
(500' sand in L)
35' - begin St. R. - between Moc & horn

Sept 22 - Round Mt. Area - Revisit Core Creek
section again - Summit appears to
come in downstream from vert. clind
outcrop - red glassy ghyler with green
stain - Though I can't find no good
crop or exact boundary

Left bank core in ^{upstream} place ft. just NW of fault
0 -
48 p red moc - see above?
55 " begin Ed. May red st. fault
75 " Ed. May from ls. fault
195 " beds

Mr. Stang estimates 10-15 cars
of good ore left in prospect
- has rented worker & shovel to
Ohio crowd for \$1000 per mo (with
percentage of buying shovel) - must
in addition pay \$1 per ton for
percentage of using waste ore



N. end of range -
near Morcum

□ ss

□ Mn.

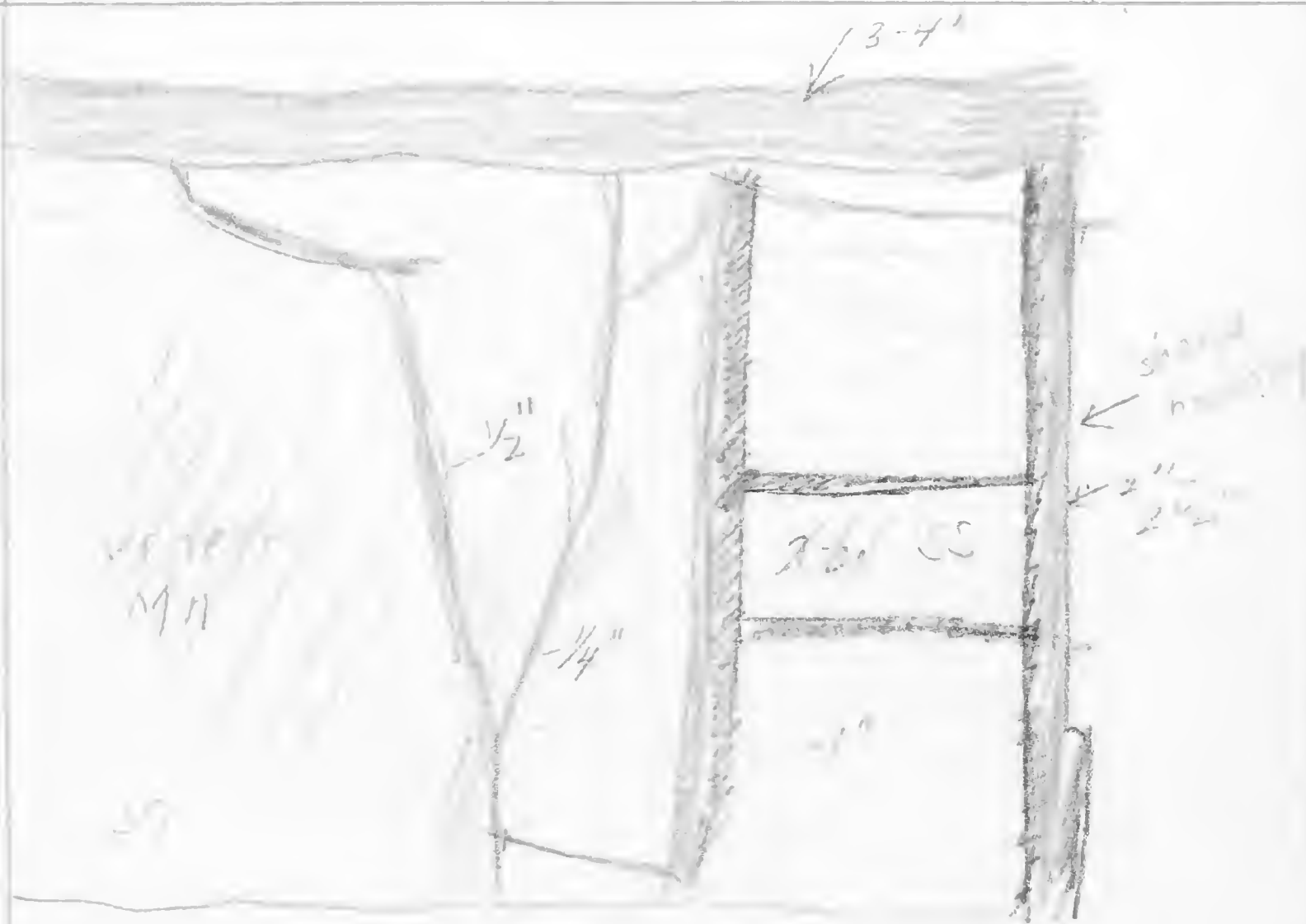
▨ red clay

vertical
Mn
on
joint
face



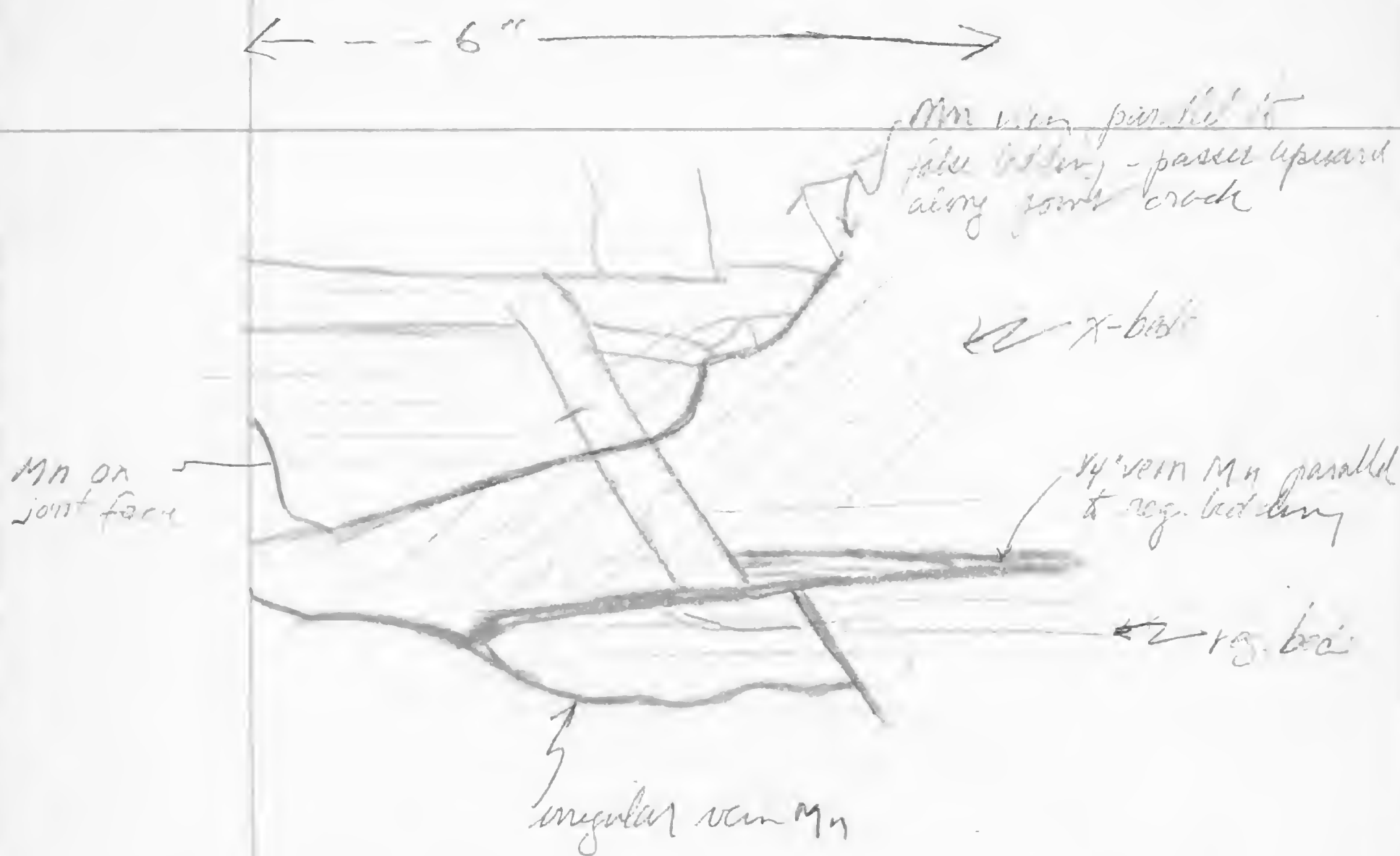
Note: Mn. nodules occur:
1) along bedding planes
2) " " nearly & joint faces - various
directions
3) in the oblique crevices with
red clay 4) matrix around ss 35

1 foot



X39

- shown same as grade (23) in
 area of building with joint form
 and clay in same and similar position
 - NE end of structure - 1/2" x 1/2"



240 Detail - N end Stange

Center of vein appear to be solid ore that merges on each side into impregnated ss. Boundaries between ss. + ^{Mn₂} rock are fairly sharp. In some places there is a border zone of good ore.

Sept 23 - Tues - Flat Top Mt - Branch Mt. View
Anv. 2970 (9:35) top Branch Mt.

- N53E 40SE Clinch on creek 10:00
at pt 1 mi + from rd Xing

- N70E 37SE ✓ Clinch on creek 10:08
3000 - 515E to Tower

- 17E of Tower - Clinch on creek 10:18
N42E, 48SE ✓

- 24E of Tower - c.g. Clinch " " 10:35
N59E, 43SE ✓

- 32E of Tower - creek now over
cloud to L - pt Clinton on creek 10:50
3010
N43, 43SE ✓

- 35E of tower ^{to tower} N61E, 45SE ✓ and Clinton on creek 11:00

- 37E of tower Clinch back on creek
N64E, 45SE ✓

- 42E of tower - Clinton back on creek

- 50E, N66E, 30SE Clinch " "

- 55E, N67E, 41SE ✓ " "

242

N30E, 64SE - 3205' on crest (12:25)
 Db ?

243

- Don 3195 12:40 - down to crest
 N83W, 85S = beddy on slickenside
 - many evl chert lappen at high
 to SE

N77W
 40SW

- { N75W 43S - look at - an N58E of town
 N80W 39S - Don - good exposure
 - crest 4 to SE - 12:50 - bed
 chert flat line to (pt 2)
 3200 (8 mi. a, beyond high pt 1)
 (are N28W of less Pigeon Hill Sta)
 Pine Grove Ch. line 100 yd E of ")

- Db N15W, 12W - 300' ± beyond last
 road. Don - cliff on SE side - under
 chert a creek - X-bedded type. Db
 - at least 35' Db exp

Db N-5, 20 W - 100' ± beyond last
 - are S60E of town - Db cliff from
 by scarp - back slope toward
 Dissect

Don in a creek just beyond N80E
 65N (?)

3270 (1:20) still Don floor

S64E of town - high pt - can

see descent sheet & Brown. Road
Log # - D6 outcrop - 3325 (1:20)
N35W, 28EW 3360 (5:00)

3380 (1:40) - Clinton ss. first with
ostracodes - 4-bedded, fine gr.
like last "D6" in many
respects

3750 (2:15) top Brown Rock
- on Clinton road

Sept 26

- For
Meyer Hole #1 down 75' & still
in clay with some ore. Ore
casing now to 56'

244

glauconitic zone at Traynham prospect in exp.
at far end of T. trench & just under later
than above exp. chert & probably represents
upper glauconitic zone - in not well developed here
- at above base of trench.

245

better than average ore - from T. trench

246

sample spec including best ore in drive

To pt. 1.5 mi SW found R - over 2100 ft. alt -
then on toward Pine Mt.

1.58 - old R

1.62 - known on R } on old Rd

1.84 - " " }

1.89 - from R



(continued)

- to house on track, 2.14 - elev 2331 (11.50)
- 2460 (11.45) NW of house - elev 2331
- related - SE - N75E



247

N20, E, 34 SE Db - with Mn - like Trapp
- purple - 1/2 doz pots - both sides
bricks - very hard - some backfat 4/1

- claim high grade in back of - red
chest? - occ. identical with
Trayham same but better

N45E 35SE Dbs. near with brown
2240 (2120) - pt N52E - of red
E 51 - Hugging - just above
red rd.

+ 2145 (2175) (sup 45' in 4 1/2 hr) - red

Sept. 27 - Sat

To pt. 1.35 below Cent. ga. Sta. on rd. Gap with
red S15E 5 full - then left to road S75E
M102 NW - no crop - red - of road C on
Dunham Church

- N45E 35SE - 5 ft. in hole (25') dip 8 feet
2251 (750)

- N57E 30SE - 17 ft. dip 10 ft. - 11 ft. in
St. 8 - about a 1/2 mile - same as last

N45E 35SE Knox - Van. - "2090" (7150)
+ "195" on rd. 2000 ft. 8' 40'

Knox N45E 10SE - beyond 15 mi. of Dunham
in 1 1/2 th. creek

Knox N52E 9SE - 5' dip - red - SE = red
1 + 1/2 mi

Sep 29 Mon.

- visited A.C. Chapman re plan for prospecting

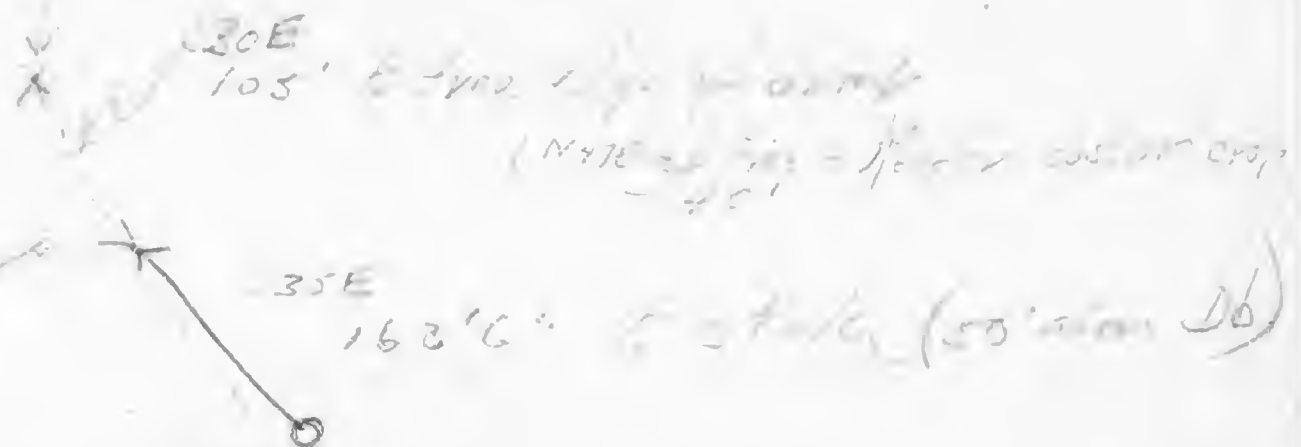
- Meyer mine

Hole No 1.

- 68'8" - 75'2" - short - both on top

Hole No 2 now down 30' -
good ore bearing mat.

- DD. N41E, 72SE near Meyer mine
"2365" 10.25



low and dump of
- from eastern red pit a piece lead N40E -
by creek at pt. 270' from red dump - on the
south long steep floor on fairly steep dip - no creek.

#1 - To rd SSE = 22'6"
to cut SSE
- to edge house - 36'6" = NE

2875

II 2 - 20' SE of ref.
S 2' N 42E of corner to the shed

Pit 11

II 2 - 20' SE of ref.
 52' N42E of corner Little Island

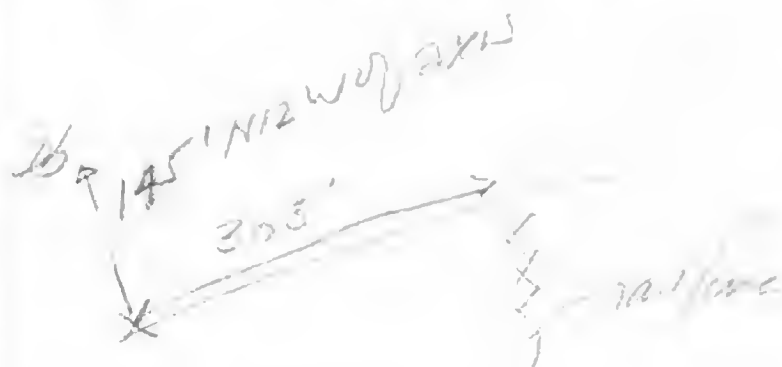
Pit 3
 field station, 50 ft N61W = 55

even. 2420 at pit #1 - 500

Pit #2 in 25' SSW of #1
 - 500' ± beyond road fence on W. - at pit
 summed N of creek the paper shows - just comp.
 50' above pit #1 (= 2535 ± on Cassin's map)

- 195' beyond road fence just N of creek - paper shows
 - 100' above pit #1

By main N61W in (on Cassin's map) line



Sept 30 - Tues

- Arrived at camp at 11:00 - morning
 - Left 2050 (11:55)

- 2590 higher pit 12:05

- 2875 local summit - much Db. flint -
 coarse granitic forming ss. with corals 4/4

249

stem middle + one good *Aepidoceras*
- no chert flint seen there far -
on one side of Morrow run

- 2910 local? high - Don chert in
small piece abundant

- 2990 (1:15) - fairly or nearly. Stop on
flint

- 3000 - top - heavy mass of ^{quartz &} flint
in chert run

- 3050 - 1:35 - Db? - very hard - flint

*

- Correction for upper Shaw Creek - remove
fault near Lefter prospect - country north
of prospect + below (NW) is Clinton that
lies under Ton of valley - Brandy Ridge
is capped with Db (only occasional crops
of Don found) - ~~Don fault should be~~
~~removed~~ - put Db on hill to W of
present Don?

Lefter pits

- lower pit 50' inch x 200' long - depth 0-12',
bottom irregular - sandstone up to 6'
thick + some of largest pieces of blue ore
in all mine of this zone (near upper part
of pit) - it felt like ore a sandy or porous

250

45

- some like the red & m. sand clay
 - it is contained in a mass of dark brown
 sandy soil along with V-binder of common
 "Clinton" ss. - thin zone of slightly harder
 with nodules - in many parts, the
 pit the surface appears entirely barren

- Several other pits are scattered ^{higher one is} pit, 1st -
 50' in diameter - 15' deep (20' only
 pit in center) - upper of them two
 badly damaged

- 25' diameter 5-8' deep - into Clinton
 (former "lower pit") - 0.5 ft. 25' to 1 ft.
 nodules - in NE side 4' section of
 mottled clay, sand, sandy, greenish,
 containing nodules of low-grade Mn
 - also in 2' sandy soil - no high grade
 ore to be seen - nodules do not
 cover more than 5% of surface

- on same it is back to the house - rough
 mound Clinton N85E, 52 N = 0 ft - pits
 far in valley here.

460 W. 8/5 W. ^{325'} on Clinton in Morris pit nearest
 house - 25' E of house, just beyond barn
 - this pit 25' x 100' + 10' deep
 - show no Mn -

Two other pits beyond are comparable
in size but more irregular in shape & bottoms
of both are filled with water over trough
between banks - on lower pit left
had to shut down washer - on
third pit bottom? again floor -
run in by

252

- on 3rd pit instead saw - not the
site - at least exposed upper $\frac{2}{3}$ (=10')
- not - base of this part shows variety
of red with green bedding - at base is
black hard white chert or - strongly
not in place - base of this is very
dark - green than before - very
similar lithologically - 2 Ton masses
3+ in diameter also present
This looks more like recent lake
than like any sort of cavern deposits

- as a green clay is clearly in place -
not well bedded - shows no bed - Ten in
all, but

Oct. 31 - Sun

2370 - "14/5" (3' 11") - up 45' m - 2 m
- 3 pits of which 2 are filled with water
both being 10 ft apart - between - large
mass of water found everywhere

- 335 E of the heavy chert ridge 140' above road

In wooded foreground (base of which lies
50' above silver trail) in unmineral
Oondaga section in exposed
part of road - base of
green waxy clay with flattened nodules
of low grade Mn + Fe. - few
inches of the exp - then 10'± of blocky
X-bedded ss. - looks lith. like Db but
contains no for. + fresh pieces are
slightly granular - probably best to
put this in Db - does not look like
Clinton in spite of green clay - no
stratification - nodules are in similar
to Clinton + apparently in limited
to clay bed. - ss is well jointed + all
joint faces are plastered with Mn
dendrites - some very thick - most
of them appear to radiate downward

- N75E, 20N40 - V. - ss shows poor

bedding - not seen in place

254

- in wooded foreground - up hill 135'
(25'±) - p. 2125 of bed - in road bed 100
ft

SHE of wooded hill - 120'± of bed - p. 2125
at elev 2500' + very heavy Dn floor 1 = 95'±
above rd)

N60W, 20SW - Db on hill 50'± from rd 48

St. Lawrence River - strike-slip fault
 possibly 7-fault or 8 pieces?
 small gold?

Oct 5 - Sunday - Measured Sections

A

- 1) Mott - top of hill N 70 E, 31 E - gray phos.
- 2) " " " " N 60 E 67 SE -
 - interval between here & first
 mostly covered - low point - 5
 high dips
- 3) St. Pierre - low ls. N 52 E, 30 SE -
- 4) " " - black cherty ls. N 60 E, 75 SE
- 5) " " - N 60 E, 20 SE - thin - cherty flinted
 ls. begin 20' beyond - then
 part of low dips
- 6) " " N 60 E, 25 SE - contact with
 chert, Knox - basal side of glacial
 zone

120 - 1-2

63 - 2-3

183

480 - 3-4

337 - 4-5

135 - 5-6

945

MOC.

St. R

✓ #B Gap (Mull)

- 1) base of Clinch N42E, 72SE
- 2) " " Clinton N50E, 41 "
- 3) " top " N60E, 54 " - green shale

B # Clinton - N64E, 75 " - covered now
to bank

3 " N81W, 67SE - covered ahead

6 " " " " N71E, 85SE

7) Base of chert N63E 88SE

8) top of cgs, chert " " - Dr
just beyond

255' #C - in East School

1) St. Rm N71E 25SE - top of fm? - a
still on MOC (red spec. just beyond)
- rock from top of fm - [3' to
S of outcrop (c) are good spec.
layers. - then certainly St. R. - here
to C1 could be placed on MOC
N60E, 36SE at base bed]

2) St. R. N60E, 28SE

3) " " N50W, 23SW

4) " " N38E 41SE - local name for
with typical spec. - contrast with
other ones

D

- 1) Top of Rock N7E 66E
- 2) sandstone N17E, 71 W
- 3) top of rock N4E 30 E
- 4) red N4E 84E
- 5) top of rock N3W, 55E - Ed. May sh
look just beyond

✓ # E - Rd. SE of Rock Creek

- 1) Top E-W, 60E
- 2) Top N50E, 46E
- 3) Contact sandstone N17E 25E E
- 4) Top of sh. N46E, 37SE
- look beyond

✓ # F - Rd. SE of Rock Creek

1) Rock N42E, 67SE - top of Rock
Jun. to SE of top of sh. sandstone
with sandstone 21 - 100 ft
then in Jun. (climb 74SE, 78E)

- 2) N51E, 86SE - climb
- 3) N61E, 74SE - base Clinton - red

G - Rite Mt

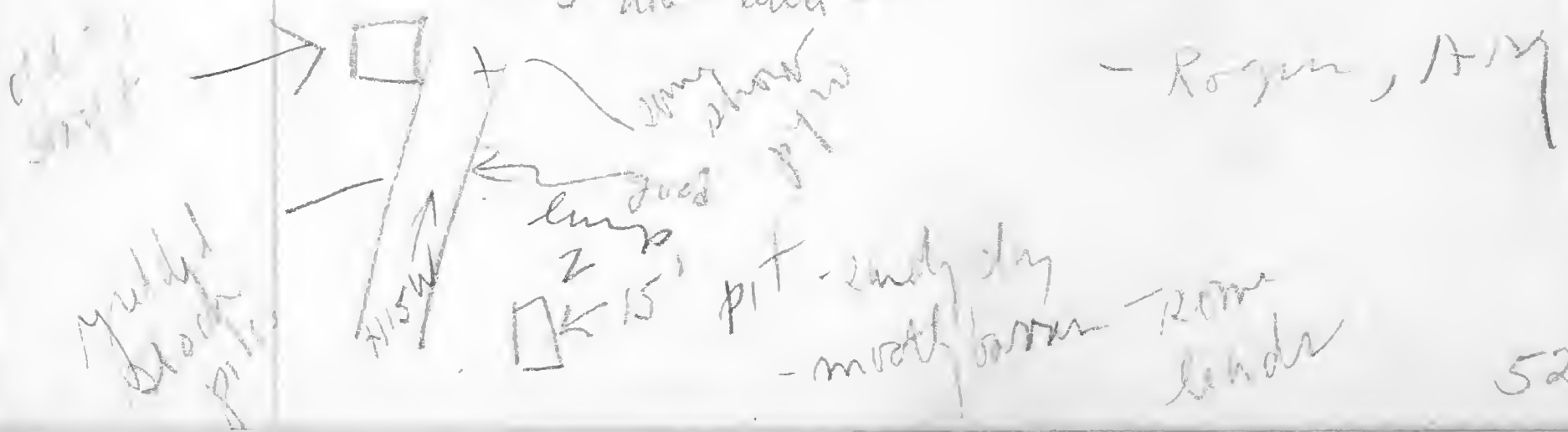
- 1) Clinton - sandstone contact on creek
N65E, 188E
- 2) N69E 22SE - white sandstone
- 3) N53E 25SE - Top of Jun. - red
- 4) N53E, 43SE - top of Jun. - red
- 5) N69E, 33SE - top of Jun. - red
- 6) N70E 31SE - top of Jun. - red
(D. Shorby zone, red just below 51)

✓ # H Sugar Lake Spring

- 1) St. Joe contact N 76 E 87 NW
(68 mls in St. Joe Spring)
- 2) Red Mix N 63 E, 72 NW
- 3) Ed. May N 64 E, 69 NW - black
fine ls. - mic. in flint - red
to all

- 150' ±

- in bottom - high grade
- Day 1 Stephenson 2nd pit located N 75 W
at road tunnel has been suspended to 20' ±
+ bedding from dump has encountered
some high grade
 - at 65 W of rd tunnel was 15' ±
small mound of pyroclastic in dump
- it was large mound
 - pit 10' ± deep + duff at top of pit
close to spot where Mueser coll. catch
some good pyroclastic above it top
- 3rd pit 10' ± + some lead more strike (red)
 - one bar 3 x 6' x 8" is wet filled with stuff
or mostly pure pyroclastic - true the dark
pink lower grade
 - have been hit across the road at all
 - - 5' hole - little in



(SW of)

SW

- on below ~~data~~ pit 2 on 6 feet - check
a little good on - 53 to SW & lower

- 575W of tunnel on 8 feet - several
good leads near bottom - gullied
broken pit & several samples

Oct 7

- Tues

Thayer has mine right

"Baker Road" (now owned by Pender, W. E.)
1995 on rd 8:50 - at pit 92 m. NE
of Bent Bank Mine

- Clinton E. White 5' 11" - heavy on ledge
2280 (9:15)

(9:25)
- 2455 "1st of 'Gleason'" - 1451 E of old
min "washer" - Clinton on foot - for
film Min - questionable "nick" as

257

- 2320 (9:30) - broken pit - in talus
no spec. 8' x 0-4' x 2'

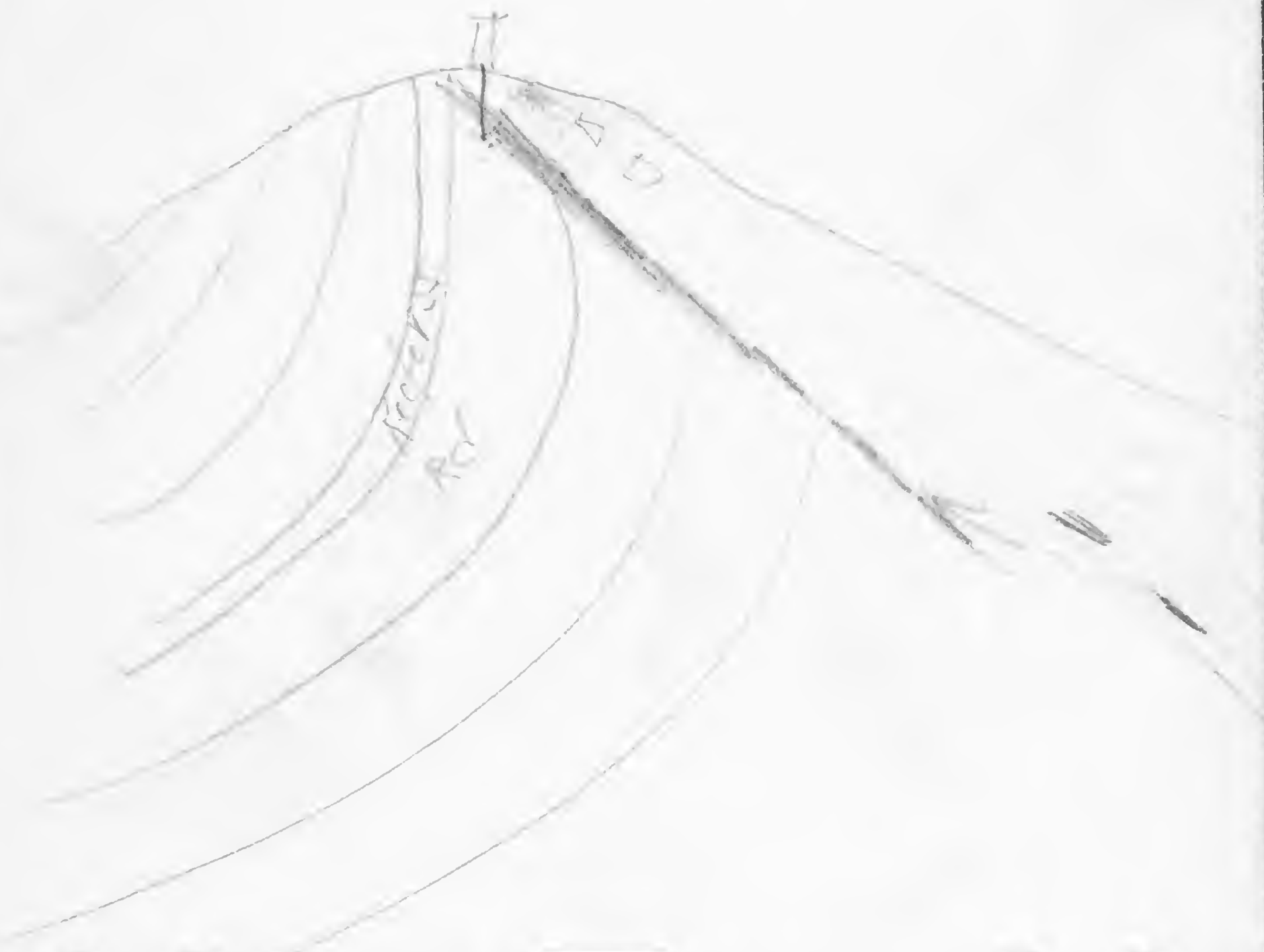
258

- 2275 (10:15) - lower pit - silver
on in talus

Roy Fandree

- 18 sh 24" x 30" - 51" in shell

- G. L. Anderson - 1939 - first work
on property for MA - carbon (30' x 1')
53



was now needed for F. - between
Munich
- Fred & John had 60 day return

was projected for F. - between
Mn & Mt.

- Fred & John had 60 day option
+ worked two years 1939-40.
- with one - hauled away
wagon load of their stuff
+ Andrew - no pay
- Thompson, of Alderson, W Va
now sinking a buoy
- drove 102 miles in for
single - all way to crest

3 hole at Mayan - in pit
had rock at 56'6" - 57'4" - and 59'
- covered at 35' (11-33')
(15" pay) - about 5' carbon sheet
+ clay

Oct. 5 - Wed.

Good long Sept 1916 - 1917 - Good the

Whisker about 60 (1917) good one

1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100

1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100

W. H. H. 1913 - 240
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100

1st pit F (30'±) of boundary
Thompson Pit #1 1938
15 days - Carren Knox - chert & clay
(Thompson 1938
Fred 1939
Meyer 1940)

2nd Pit east of boundary
= Thompson #2 - 1938
to depth 20-25'
- deepened of Fred to 40'±
+ tunnel from side
- found satisfactory on
comparison to main shaft
(10-12 tons on obtained)

3rd Pit East (covered shaft)
of Fred to depth 40' (12)
- Carren on regarding Mr -
some firing met - no real
red chert.

#4
#3 " 41'6" beyond N of #3 on Rd
228 N141E of No. 2.
[in pit]

In main pit a very, relatively
 intricately mixed up with a variety of
 clay with variable masses of chert in
 various stages of decomposition. Some of black
 chert streaks 20' long - up to 1" thick
 with brown clay above & below. Main pit
 face shows hole #4 in relatively but
 irregularly stratified & has with bands
 pink clay, yellow-brown clay & streaks
 of ore & black stained chert - along
 with very massive of lighter material
 up to 3' in diameter
 - one large butternut ball rock encountered
 - some of beds of brown clay exceed 3'
 in thickness - with streaks of "wood" &
 stained chert.

Oct. 30

Visited Mt. Tony area. at Knottville faulted
 area coll. spec. of supposed fault breccia
 - piece cemented by Mn. Rock is much
 replaced by Mn - many of ss. (brown)
 areas have curved boundaries & piece
 crinoid of ore are bordered by bands of
 impregnated ss



cavity
 - impreg. ss
 Mn

Nov. 3

at Plastered Va. the US Gyp Co.
 in morning at 500' & here listed 57

Gap (Hawleyville) to 1000 ft. no
bottom - angle of the fault?

- 257 a Ton. - Holly Brook
258 a Ton. sil. foss. - Boyd new pit
259 Db. - Gap Mills section
260 App. Ore - main pit
261 Bank Bank, main pit
262 " " pit above
263 Pit A - "Upper Linton" prospect, Potts Cr.
264 " B - " " " " "
265 Clinton fm. - Rd 191 Crest
266 Db. float near Ramsey farm
267 " near Gold. Sta. H. - Rd 191
268 " Flint Top 100 yds. E. west of Ramsey farm
269 Pot. ? float near Boyd Mine
270 Ton. lam. clay - Boyd pit
271 Ton. clay & Mn. - Boyd pit
272 Mn. " "
273 Mn. - Donahue Prospect, near Gumpert
[274 Knoxlet. fault in Mt. Terry area. etc.]

Sat. Feb 21, 1942

- 275 Mn. at fault in Bundy Mt. clay - Joseph
275a → contain "Cu. Sulf." - N160E, 48SE
- St. P. with stylolites also exp. between
Moc. & "Cu. Sulf."

March 21, 1942 - Sat

To Mineral Ridge mine with
Miser, Mr. Town (Vice Pres) &
Kyle (an officer in Co) & Jack
Kleese, Supt. of Plant. [Col. Britain,
a checker - not present]

- This group has spent about \$75,000
putting the mill in shape. - known
as American Alloy Corp. - bought
plant from Nelson of Strasburg Va.
- asked for \$100,000 for equipment
from R.F.C. - got \$20,000

This mine actually produced
12-13,000 tons concentrate from
1850 on. Monroe estimates
30,000 tons remain. [Holden
estimated less than Grady
but still over 100,000 tons]
Two cars produced & present
overrun recently - at a loss.

← 16' →



- heavy interbedding ^{25'±} seam - to be chief problem
- ore body 25'± thick & close to 1500' long -
- zone 185' wide in some places
- ore in bands paralleling bedding &
in over joint cracks - some replacement
- related to fracture zone

[March 24 - for ... see p 62-63]

March 25 - Wednesday

- With Hon. Ferguson - Rogers - + Moore
Unac. Mineral Co. 50' - 100' from
- have stopped 14 core of 39 ± y. 19a
+ some low grade - from clay from clay
- 5500 ton (a - layer) - 12.50 (a - layer)
in King's estimate
- Low. pit - good hard ore in lowest 12
of 8' overburden - ^{5'} yellow clay below stone
very little hard ore.
- in. middle pit much more ore in middle
clay - much of it small & hard - some
10' of ore - locally well exposed - surface of
surface layer is rough - the average
thickness of 12' in. middle pit has been
probably 20'.
- Upper pit - good ore in part of middle
clay - suggest of 2 pits - overburden
may not be so good as in lowest
pit - carry up to 20' here - more
of ore hard - nodular masses up
to 6" - some the barren areas in clay
- some glite blocks in clay (down
originally in sol. cavity?) parts
of exposed clay from quartz rock -
some of ss. boulders in clay about
1' in diameter - are distinctly rounded
+ also there occur large nodules
of mm. apparently derived from clay
- some, mm. in diameter - other
large masses of clay ore which
are

bottom part (now slumped), east of
Ferguson. Iron is good (1-15% better)

- 150' x 45' wide x 30' deep below or beside
- iron along creek that may reflect
strike of ore. This zone has been
inadequately prospected as to depth - 800
tons of material
- over rectangular area 65' x 200' x 5'
surface material above - fair ore
in volume found in 1-15% better
grade 3,000 tons of concentrate
+ more - more iron ore
as has been taken out - 4,000 -
cost at 5,000 ton. A small part of
of this tonnage could be crushed
- might find considerably more ore.

Embree Iron Co. N.E. Lewis, Gen. Mgr
L.E. Wheeler, Pres, Easton, Md.

Robert Foster Mgr on R. track near
Mt. Archer. The area just hydrocarbon for
iron & coal being utilized for iron.
Iron occurs in layers & pockets around
pinnacles of unweathered Shale ls. (Iron
also occurs in weathered material in small
quantities)

- a 5' thin Bumpass Cove to
old mine. good part near valley floor &
climbed to old Peach Orchard mine -
better to be seen now

March 24, Tuesday

Lick Mt. Prospect -

En route to Tenn. stopped off to see Mr. Charles Huddle who operates a sand quarry on the highway (US 41) at point 6 mi. ± NE of Wytheville, Va. Sand is trucked from quarry on Lick Mt. - in Enon gtzolite. Drove over to Smoketown where Huddle lives & has his laboratory to work on Lick Mt. Min. Visited prospect with Russell Huddle son of Chas. H.

276

Prospect lies at least 230' below crest - at point where crest is 750' under. Have driven a tunnel in nearly to axis of mt. - total length 7308' in brecciated Enon gtzolite cemented with iron oxides - average content probably 9-10% A cross-cut to it at pt 75' in from portal was carried 29' - last 19' ± in clay (from Shady?) - probably across a fault. A cross-cut opposite on south (tunnel heads N 88 E) was carried in 38' - ended in ore - first 4' ± barren. A second cross-cut on south at point 125' in from portal was carried in 21' - all in ore & ending in same. (company claimed blasted ore "too fine for their selective furnace. Sunk shaft at least 75' below tunnel to depth 35' - ore in ore beds in clay on either. Some clay at end of tunnel - a fault? Have stopped 9 cars of surface

on running 14th

Estimate 200,000 tons of 9-14%
(using figure of 11 cu feet to ton) =
60,000 tons high grade = 28,000 tons Mn

Mar 26 - Thursday

Shady Valley

- 1) Blackburn Tract - hill find during
last world war - south end of Shady
valley 1 3/4 miles SW of Shady valley center
- controlled by Nat. Malaria Co. - small plot
- road on upper part of hill - not yet
- only contribute to main flood
- dated as section (6') of road is some
- but quite bit of - also from different point
- prehistoric investigation - much of
- few more or more - no large pits
- just down to d.c. - some pits common
- upper side seem to show in upper
- on the side - a bit of side - not really
- no one known from E. - in distance
- Blackburn tract the most southerly
- probably within 100 y of base of Shady
- all in crescent shaped area
- controlled by Bentley Co. (Oscar
Wills)

- 2) Wright pit - 1 mi NNE of Blackburn place
- old iron pit (last some 1777) - no recent
work - pit now mostly filled - Wright of the
co. depth - 30-40 ft - 30-40 ft of sandstone
to underlying ss - the prospect mostly
in main area now

7. Walker - not mounted

8. Bentley - 7 1/2 x 5 x 1/2 ft. of brown
pale - brown in top looking down - some
dark - very good dark - some 2 ft. from top
on stopped - on - large grey calcareous
masses up to 1 ft. across, some 2 ft.

March 27 - Friday - BELL HAWKINS

To reach Wells at point of Howard Hill
- to see one of his men diggers by way
300 above rd - to Bell Hawkins digger
- very good on all levels - probably well
run down to 50% - deposit some on
sand at top of Green (top of Lake Dr.)
- see the many of the old sand
can't see - see very impure sand
- evidently replacement - looking of clay
bricks material - see - some above on Green
- see some sand building of low 15 - others
parallel - building - have stopped 68
to date - 22. May 10 - building
- see also top of Green (Lake Dr.)
- see July 10 - see some small

- Then we put a good Keller level out
 on ground surface of pit - see from bottom
 of there but not seen in above - has
 3 acres in valley to SE. The base level
 of bottom several feet in thickness - carrying
 good ore - just few directions of small
 nodules - not not seen down to see in
 any pit of about there are in large no.
 - saw one pit below SE. massive clay +
 ore (1-10 inches) - shale good - still
 some nodules - shallow - just above the
 scattered silic. dol. (pts. Embury with ore.
 Much) - some secondary silic. nodules.

- saw as above there, but in country on the
 may be some ore in center of the hill
 Houston property - in center but is
 very small amount in place.

TAYLOR VALLEY

On E Taylor Valley. 11/11/11. - noted S. R. 11/11/11
 on low grade - 3.5 + better - one big nodules.
 - through 1st tunnel + to see for ore -
 in operation, about 1/2 way to Tenn. G. S. has
 detailed map of ore runs in tunnel.
 In one narrow band of recessed ore pit
 is much like that in road pit on Rd. 111.
 [one delivery, and can hypothesis is that
 of pic. - there is no indication in
 floor - one of nodules, but in Co. should
 dig out some]

Taylor Valley

75' x 45' - in upper level
 55' x 37' - " lower
 - two beds are 25' apart

$$\begin{array}{r}
 75 \\
 45 \\
 \hline
 270 \\
 375 \\
 \hline
 540 \\
 55 \\
 37 \\
 \hline
 325 \\
 125 \\
 \hline
 203 \\
 3375 \\
 \hline
 5410 \\
 2050 \\
 \hline
 27050 \\
 10520 \\
 \hline
 13520
 \end{array}$$

$$\begin{array}{r}
 8000 \text{ cu yds} \times 1.5 = 7500 \text{ tons} \\
 27 \overline{) 136000} \\
 \underline{135} \\
 1000
 \end{array}$$

derb @ 1/4" = 750 tons
 conc. in tunnel

$$\begin{array}{r}
 750 \text{ tons} \\
 150 \text{ - moved} \\
 \hline
 600 \text{ tons exclusion of} \\
 \text{open cut above} \\
 \text{add 100 tons for upper cut} \\
 \hline
 = 700 \text{ tons} \\
 \text{reservoir}
 \end{array}$$

- now moving 1/3 of water - very wet
 - not enough water in dry season last summer
 - may have 5000 tons of low grade fuel
 - water for additional water for fuel

$$\begin{array}{r} 2' 29.4 \\ 3 \overline{) 50.10} \\ \underline{50} \\ 0 \\ 20 \\ \underline{20} \\ 0 \\ 27 \\ \underline{27} \\ 0 \\ 13 \end{array}$$

750
 150 - more
 600 fore
 open cut close
 add 100 for per represented
 = 700 fore reserved

- now using 1/3 of water - very much better
 - not enough water in dry season last summer
 - may have 500 tons of low grade ore
 - water for washing material probably not
 - used about 100 (plan of last year)
- (see p. 67a also)

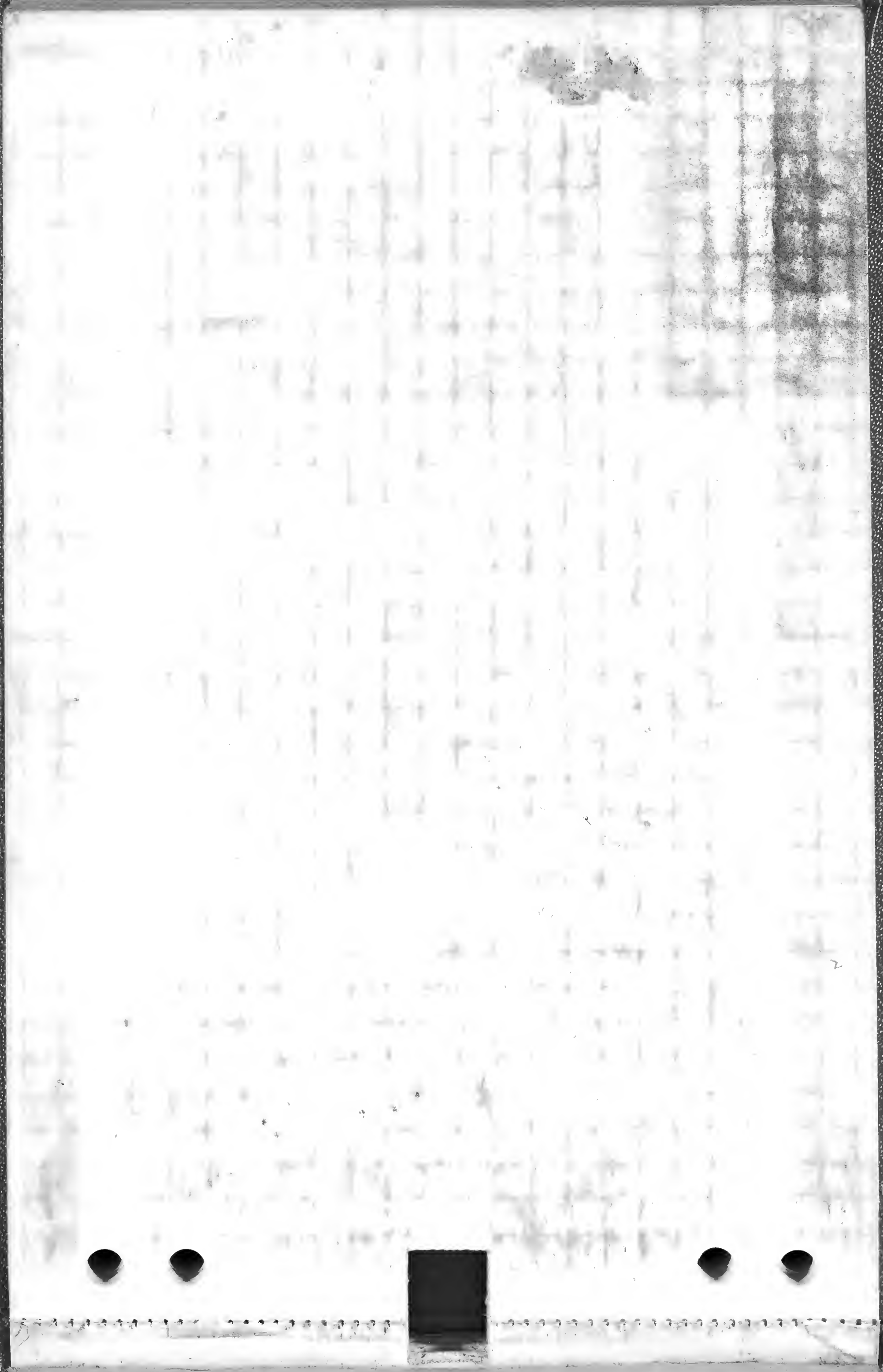
Mar 25 Saturday

Blue Springs Mine - Longview Valley, Tenn.
 2 1/2 mi. N. of Greeneville. Not on ground.
 Has 40' hole in hillside to maximum
 depth of 71 feet in part of their sample was
 taken 7' with 3' interval and was bit - worked
 (Ferguson figured 600 tons reasonably concentrated
 from 3 small holes - Feb. 28 hole 3' x 3' x
 7.31) - then 40' hole. Then just going to
 hole all of good material was removed
 away for washing but in later hole only
 25-30 tons was taken from good 3'
 interval. That left behind later very lean
 lignite ore. That the material is not
 a workable deposit. 14' hole was attempt
 to obtain suitable tonnage. Ferguson
 estimated a 25' reserve around good hole
 (this seems too generous). No additional
 prospecting gold put in the area. Evidently
 government qualified records for only 10
 tons of gold in reserve when the mine was
 500 tons of better grade property (is noted).
 [ratio of concentrates to dirt worked very
 high - Bond & Reichenow saw only the
 concentrates].

54500 4500 cm. ft. min
17658

28) *Chamaea fasciculata*

To Pitts only - my property - a *land*
 [You willow to be 4000 +
 5000. *land*]





.....



